What to do if you're exposed to a RADIATION THREAT

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What is a radiological dispersion device (RDD) and what can I do to protect myself and my family?

A radiation threat, commonly referred to as a "dirty bomb" or "radiological dispersion device" (RDD), is the use of common explosives to spread radioactive materials over a targeted area. It is not a nuclear blast. The force of the explosion and radioactive contamination will be more localized. While the blast will be immediately obvious, the presence of radiation will not be clearly defined until trained personnel with specialized equipment are on the scene. As with any radiation, you want to try to **limit exposure**. It is important to avoid breathing radiological dust that may be released in the air.

The primary purpose of terrorists' use of an RDD would be to cause psychological fear and economic disruption. Some devices could cause fatalities from exposure to radioactive materials. The size of the affected area and the level of destruction caused by an RDD would depend on the sophistication and size of the conventional bomb, the type of radioactive material used, the quality and quantity of the radioactive material, and the local meteorological conditions, primarily wind and precipitation. The area affected could be placed off-limits to the public for several months during cleanup efforts.

What to Do Before a Radiation Attack

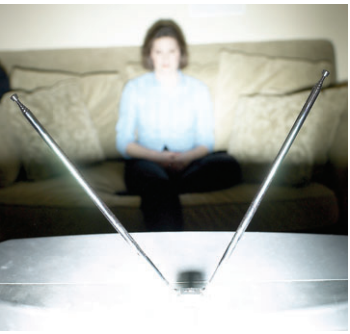
There is no way of knowing how much warning time there might be before an attack by terrorists using an RDD or what protective measures should be taken. Be ready to first take the same protective measures that you would for a conventional explosion Also be ready to take additional measures you would for protection from fallout radiation after a nuclear blast. The force of the blast would be like a conventional explosion, not a nuclear blast.

During a Radiation Attack

While the explosive blast of an RDD will be immediately obvious, the presence of radiation will not be known until trained personnel with specialized equipment are on the scene. Whether you are indoors or outdoors, at home or at work, be extra cautious if you witness an explosive blast. It would be safer to assume radiological contamination has occurred — particularly in an urban setting or near other likely terrorist

targets — and take the proper precautions.

- If you are outside and there is an explosion or authorities warn of a radiation release nearby, cover your nose and mouth and quickly go inside a building that has not been damaged.
- If appropriate shelter is not available, move as rapidly as is safely possible upwind and away from the location of the blast; then seek appropriate shelter.
- If you are inside and there is an explosion near where you are or you are warned of a radiation release inside, cover your nose and mouth and go outside immediately. Look for a building or other shelter that has not been damaged and quickly get inside.
- If you think you have been exposed to radiation, take off your clothes and wash as soon as possible.
- Stay where you are, watch TV, listen to the radio or check the Internet for official news as it becomes available.



- If you have time, turn off ventilation and heating system, close windows, vents, fireplace dampers, exhaust fans and clothes dryer vents. Take your Disaster Supply Kit and battery-powered radio to your shelter room.
- Your shelter room should be underground or in an interior room, placing as much distance and dense shielding as possible between you and the outside.

- Seal windows and external doors that do not fit snugly with duct tape to reduce infiltration of radioactive particles. Plastic sheeting will not provide shielding from radioactivity or from the blast effects of a nearby explosion.
- Listen for official instruction and follow directions.
- Take shelter immediately, preferably underground or in an interior room of a building, placing as much distance and dense shielding as possible between you and the outdoors where the radioactive material may be.
- Listen for official instructions and follow directions.

What to Do After a Radiation Attack

Contamination from a radiation attack could affect a wide area, depending on the amount of conventional

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explosives used, the quantity and type of radioactive material released, and meteorological conditions. Radiation dissipation rates vary, depending mostly on the decay rate of the radioactive materials dispersed and how much of the radioactive material is concentrated in any particular spot after it is scattered by the explosion. Evacuation might be more practical than staying in shelter near any spots with relatively high radioactivity readings. A radiation attack will not produce a high-altitude cloud, so it cannot carry radioactive particles hundreds of miles as a surface-level nuclear blast would. ☢

Remember: To limit the amount of radiation you are exposed to, think about shielding, distance and time.

- Shielding: **If you have a thick shield between yourself and the radioactive materials, more of the radiation will be absorbed and you will be less exposed.**
- Distance: **The farther away you are from the blast and the fallout, the lower your exposure.**
- Time: **Minimizing the time spent exposed will reduce your risk.**

Governor
Ernie Fletcher

Lieutenant Governor
Stephen B. Pence,
Secretary Justice and
Public Safety Cabinet

For more information about how to prepare your disaster supply kit and prepare for a specific terrorism threat or a natural or man-made disaster click on the related links:

www.homelandsecurity.ky.gov

www.redcross.org/preparedness/cdc_english/CDC.asp

www.ready.gov

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